

20001/ 1. An electrical connector comprising:

2 a housing; and,

3 a genderless electrical contact mounted within said housing, said genderless
4 electrical contact having a longitudinal axis, a proximal end and distal end,
5 said distal end having a planar electrical contact engaging surface with the
6 plane thereof intersecting the longitudinal axis at a predetermined angle,
7 said planar electrical contact engaging surface being positionally maintained
8 within said housing to permit repeatable electrical engagement with a planar
9 electrical contact engaging surface of a corresponding genderless electrical
10 contact.

1 2. The electrical connector of claim 1 wherein the plane of said planar
2 electrical contact engaging surface intersects the longitudinal axis at an
3 predetermined angle in the range of 8 to 39 degrees inclusive.

20002/ 3. An electrical connector comprising:

2 a housing; and,

3 a genderless electrical contact mounted within said housing, said genderless
4 electrical contact having a longitudinal axis, a proximal end and distal end,
5 said distal end having a planar initial electrical contact engaging surface
6 portion with the plane thereof intersecting the longitudinal axis at a
7 predetermined angle and an arcuate final electrical contact engaging surface
8 portion, said initial and final electrical contact engaging surface portions
9 being positionally maintained within said housing to permit repeatable
10 electrical engagement with planar initial and arcuate final electrical contact
11 engaging surface portions, respectively, of a corresponding genderless
12 electrical contact.

1 4. The electrical connector of claim 3 wherein the plane of said planar
2 initial electrical contact engaging surface intersects the longitudinal axis
3 at an predetermined angle in the range of 8 to 39 degrees inclusive.

1 8. An electrical connector assembly comprising:

2 a first electrical connector comprising:

3 a housing; and,

4 a genderless electrical contact mounted within said
5 housing, said genderless electrical contact having a
6 longitudinal axis, a proximal end and distal end, said
7 distal end having a planar electrical contact engaging
8 surface portion with the plane thereof intersecting
9 the longitudinal axis at a predetermined angle;

10 a second electrical connector comprising:

11 a housing; and,

12 a genderless electrical contact mounted within said
13 housing, said genderless electrical contact having a
14 longitudinal axis, a proximal end and distal end, said
15 distal end having a planar electrical contact engaging
16 surface portion with the plane thereof intersecting
17 the longitudinal axis at a predetermined angle;

18 said first and second electrical connector genderless electrical contacts
19 being electrically engagable with each other with the planes of the planar
20 electrical contact engaging surface portions intersecting the longitudinal axes
21 at substantially the same predetermined angle and with the planar electrical
22 contact engaging surface portions being positionally maintained within their
23 respective housings so that said planar electrical contact engaging surface
24 portions are substantially parallel at the moment of their electrical
25 engagement thereby permitting repeatable electrical engagement with minimal
26 contact bounce thereof.

1 9. An electrical connector assembly comprising:

2 a first electrical connector comprising:

3 a housing; and,

4 a genderless electrical contact mounted within said
5 housing, said genderless electrical contact having a
6 longitudinal axis, a proximal end and distal end, said
7 distal end having a planar initial electrical contact
8 engaging surface portion with the plane thereof
9 intersecting the longitudinal axis at a predetermined
10 angle and an arcuate final electrical contact engaging
11 surface portion;

12 a second electrical connector comprising:

13 a housing; and,

14 a genderless electrical contact mounted within said
15 housing, said genderless electrical contact having a
16 longitudinal axis, a proximal end and distal end, said
17 distal end having a planar initial electrical contact
18 engaging surface portion with the plane thereof
19 intersecting the longitudinal axis at a predetermined
20 angle and an arcuate final electrical contact engaging
21 surface portion;

22 said first and second electrical connector genderless electrical contacts
23 being electrically engagable with the planes of the planar initial electrical
24 contact engaging surface portions intersecting the longitudinal axes at
25 substantially the same predetermined angle and with the planar initial
26 electrical contact engaging surface portions being positionally maintained
27 within their respective housings so that said planar initial electrical
28 contact engaging surface portions are substantially parallel at the moment of
29 their electrical engagement thereby permitting repeatable electrical
30 engagement with minimal contact bounce thereof.

1 10. The electrical connector assembly of claim 9 wherein the magnitude of
2 the predetermined angle of intersection of the planes with the longitudinal
3 axes is established as a function of a predetermined rate of closure of the
4 planar initial electrical contact engaging surface portions during electrical
5 engagement thereof.

1 11. The electrical connector assembly of claim 10 wherein the magnitude of
2 the predetermined angle of intersection of the planes with the longitudinal
3 axes decreases as the rate of closure of the planar initial electrical contact
4 engaging surface portion increases.

1 12. The electrical connector assembly of claim 11 wherein the magnitude of
2 the predetermined angle of intersection of the planes with the longitudinal
3 axes is established in accordance with the following table:

<u>Predetermined angle (degrees)</u>	<u>Rate of Closure (meters/sec)</u>
39	.1 to 1
30	.1 to 3
25	.1 to 5
13.5	.1 to 10
8	.1 to 15

Sub 13. An electrical contact assembly of a plurality of genderless electrical
contacts comprising:

an integrally formed, longitudinally extending genderless electrical
contact having:

having a longitudinal axis, a proximal end, an intermediate
portion and distal end, said distal end having a planar electrical
contact engaging surface portion with the plane thereof
intersecting the longitudinal axis at a predetermined angle;

and,

web means for connecting at least two of said plurality of
electrical contacts together in spaced apart relation.

14. The electrical contact assembly of claim 13 wherein said web means
connects said at least two genderless electrical contacts together at the
intermediate portions thereof.

15. The electrical contact assembly of claim 13 wherein said web means
is integrally formed with said at least two genderless electrical connectors.

16. The electrical contact assembly of claim 13 wherein the plane of said
planar electrical contact engaging surface intersects the longitudinal axis at
a predetermined angle in the range of 8 to 39 degrees inclusive.

Sub 17. An electrical contact assembly of a plurality of genderless electrical
contacts comprising:

an integrally formed, longitudinally extending genderless electrical
contact having:

a longitudinal axis, a proximal end, an intermediate portion and
distal end, said distal end having a planar initial electrical
contact engaging surface portion with the plane thereof
intersecting the longitudinal axis at a predetermined angle and an
arcuate final electrical contact engaging surface portion;

and,
web means for connecting at least two of said plurality of
electrical contacts together in spaced apart relation.

18. The electrical contact assembly of claim 17 wherein said web means
connects said at least two genderless electrical contacts together at the
intermediate portions thereof.

19. The electrical contact assembly of claim 17 wherein said web means
is integrally formed with said at least two genderless electrical connectors.

20. The electrical contact assembly of claim 17 wherein the plane of said
planar initial electrical contact engaging surface portion intersects the
longitudinal axis at a predetermined angle in the range of 8 to 39 degrees
inclusive.

21. The electrical connector of claim 1 wherein the distal end and the planar
electrical contacting surface are coterminous.

22. The electrical connector of claim 3 wherein the distal end and the planar
initial electrical contact engaging surface are coterminous.